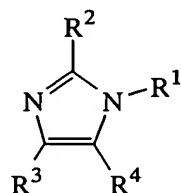


CLAIMS:

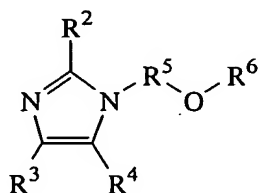
1. A resist composition comprising at least one basic compound having an imidazole skeleton and a polar functional group, represented by the general formula (1):



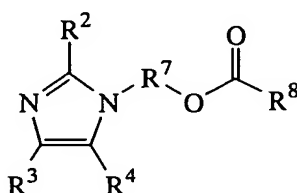
(1)

wherein R¹ is a straight, branched or cyclic alkyl group of 2 to 20 carbon atoms bearing at least one polar functional group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups; R², R³ and R⁴ are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms.

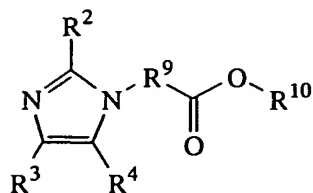
2. A resist composition comprising at least one basic compound represented by the general formulae (2) to (6):



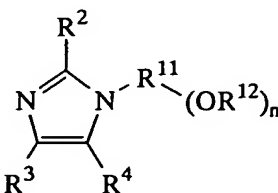
(2)



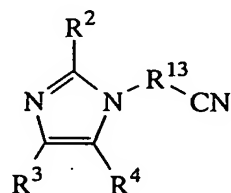
(3)



(4)



(5)



(6)

wherein R², R³ and R⁴ are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms;

5 R⁵, R⁷, R⁹ and R¹³ are each independently a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms;

 R⁶ and R⁸ are each independently a hydrogen atom or an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester,
10 ether, sulfide, carbonate, cyano and acetal groups;

 R¹⁰ is an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups;

15 R¹¹ is a (n+1)-valent, straight, branched or cyclic hydrocarbon group of 2 to 10 carbon atoms;

 R¹² is each independently a hydrogen atom or an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether,
20 sulfide, carbonate, cyano and acetal groups, or two of R¹² may bond together to form a ring; and

 n is equal to 2, 3, 4 or 5.

3. A positive-working resist composition comprising:

25 (A) the basic compound of claim 1;

 (B) an organic solvent;

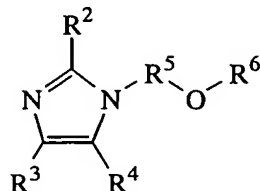
 (C) a base resin having an acid labile group-protected acidic functional group which is alkali-insoluble or substantially alkali-insoluble, but becomes alkali-soluble
30 when the acid labile group is eliminated; and

 (D) a photoacid generator.

4. The positive resist composition of claim 3 which further comprises (E) a dissolution inhibitor.

5. A negative-working resist composition comprising:
 (A) the basic compound of claim 1;
 (B) an organic solvent;
 (C') a base resin which is alkali-soluble, but becomes
5 substantially alkali-insoluble when crosslinked with a
crosslinking agent;
 (D) a photoacid generator; and
 (F) a crosslinking agent which induces crosslinkage
under the action of an acid.
- 10
6. A patterning process comprising the steps of:
 (1) applying the positive resist composition of claim
3 onto a substrate;
 (2) heat treating the applied resist, then exposing
15 the heat-treated resist through a photomask to high-energy
radiation having a wavelength of at most 300 nm or an
electron beam; and
 (3) heat treating the exposed resist, then developing
the resist with a liquid developer.
- 20
7. A patterning process comprising the steps of:
 (1) applying the negative resist composition of claim
5 onto a substrate;
 (2) heat treating the applied resist, then exposing
25 the heat-treated resist through a photomask to high-energy
radiation having a wavelength of at most 300 nm or an
electron beam; and
 (3) heat treating the exposed resist, then developing
the resist with a liquid developer.

8. A basic compound represented by the general formula
(2):



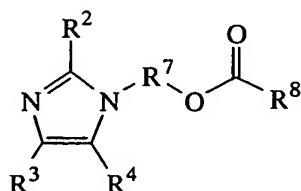
(2)

wherein R^2 , R^3 and R^4 are each independently a hydrogen atom,
5 a straight, branched or cyclic alkyl group of 1 to 10 carbon
atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl
group of 7 to 10 carbon atoms;

R^5 is a straight, branched or cyclic alkylene group of
1 to 10 carbon atoms; and

10 R^6 is a hydrogen atom or an alkyl group of 1 to 15
carbon atoms which may contain at least one group selected
from among hydroxyl, carbonyl, ester, ether, sulfide,
carbonate, cyano and acetal groups.

15 9. A basic compound represented by the general formula
(3):



(3)

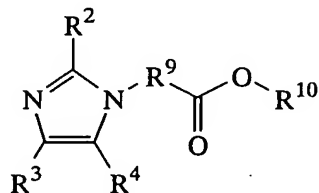
wherein R^2 , R^3 and R^4 are each independently a hydrogen atom,
a straight, branched or cyclic alkyl group of 1 to 10 carbon
20 atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl
group of 7 to 10 carbon atoms;

R^7 is a straight, branched or cyclic alkylene group of
1 to 10 carbon atoms; and

25 R^8 is a hydrogen atom or an alkyl group of 1 to 15
carbon atoms which may contain at least one group selected

from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups.

10. A basic compound represented by the general formula
5 (4):



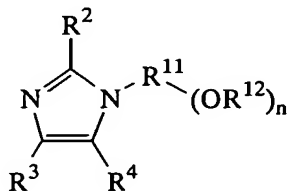
(4)

wherein R^2 , R^3 and R^4 are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl
10 group of 7 to 10 carbon atoms;

R^9 is a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms; and

R^{10} is an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl,
15 carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups.

11. A basic compound represented by the general formula
(5):



(5)

20

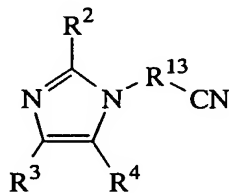
wherein R^2 , R^3 and R^4 are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms;

R^{11} is a (n+1)-valent, straight, branched or cyclic hydrocarbon group of 2 to 10 carbon atoms;

R^{12} is each independently a hydrogen atom or an alkyl group of 1 to 15 carbon atoms which may contain at least one group selected from among hydroxyl, carbonyl, ester, ether, sulfide, carbonate, cyano and acetal groups, or two of R^{12} may bond together to form a ring; and

n is equal to 2, 3, 4 or 5.

12. A basic compound represented by the general formula (6):



(6)

wherein R^2 , R^3 and R^4 are each independently a hydrogen atom, a straight, branched or cyclic alkyl group of 1 to 10 carbon atoms, an aryl group of 6 to 10 carbon atoms, or an aralkyl group of 7 to 10 carbon atoms; and

R^{13} is a straight, branched or cyclic alkylene group of 1 to 10 carbon atoms.